# 2.0 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action (Alternative I, the Proposed Projects) and subject of this EA is the implementation of a modified land use plan for Area B at Fort Detrick, Maryland. The modification would include the construction and operation of the six proposed projects within Area B that will allow Fort Detrick and its tenants to meet respective mission requirements, particularly with regard to the missions of the MWR, SPO, and MARS programs. Proposed projects include: the construction and operation of an 18-Hole Golf Course, Paintball Fields, an indoor small arms and skeet shooting range, and an Army RV travel park; the relocation of seven MARS antennas from Area A to Area B; and the security and safety enhancement of Area B's perimeter fence.

An Installation Master Plan EA, finalized in September 2003, created a new land use zoning plan for both Areas A and B. The new land use zoning plan for Area B can be categorized into six different land use types: agrifield, landfill, open buffer zone, operations, recreation, and training (Figure 2-1) (STV, Inc., 2003). Agrifield is defined as areas used for agricultural research and as open fields. Agrifield land use, the largest land use category for Area B (roughly 181 acres) is situated in the southern and western sections of Area B. The second largest land use category is landfill, which consists of approximately 95 acres in the north and central sections of Area B. Training land use consumes about 70 acres of land in the north and east portions of Area B. The 50-foot open buffer zone that surrounds the entire boundary of Area B consumes roughly 48 acres of Area B land. Recreation and operations land uses are the smaller landholders on Area B. Recreation land use located in the southeast section of Area B near Post Pond consists of approximately 5 acres of land, and operations land use contains 0.5 acres.

Figure 2-2 shows the location of the proposed projects and the current land use plan for Area B. Taking into account the six proposed projects for Area B and their proposed locations, the Installation Master Plan EA would need to be modified for Area B. The proposed land use modifications for Area B are shown in Figure 2-3. The proposed modifications would include converting a substantial amount of agrifield and a small section of land designated as landfill (reserved for future landfill expansion) into recreation land use and converting land designated as training into operations. Consequently, these changes would reduce the amount of land use allocated for agrifield, landfill, and for training in Area B. If required in the future, the current landfill land use proposed for conversion to recreation could be converted back to the landfill if landfill expansion was needed.

The six proposed projects will require roughly 150 acres of land within Fort Detrick's Area B. The following provides a description for each of the six proposed projects, which combined to create the Proposed Action and the required modifications to the 2003 future land use plan that is evaluated in this EA.

## 2.1 18-HOLE GOLF COURSE

An 18-Hole Golf Course, with a total length of approximately 6,200 yards, would be located on approximately 125 acres on the southern portion of Area B (Figure 2-2). The golf course could

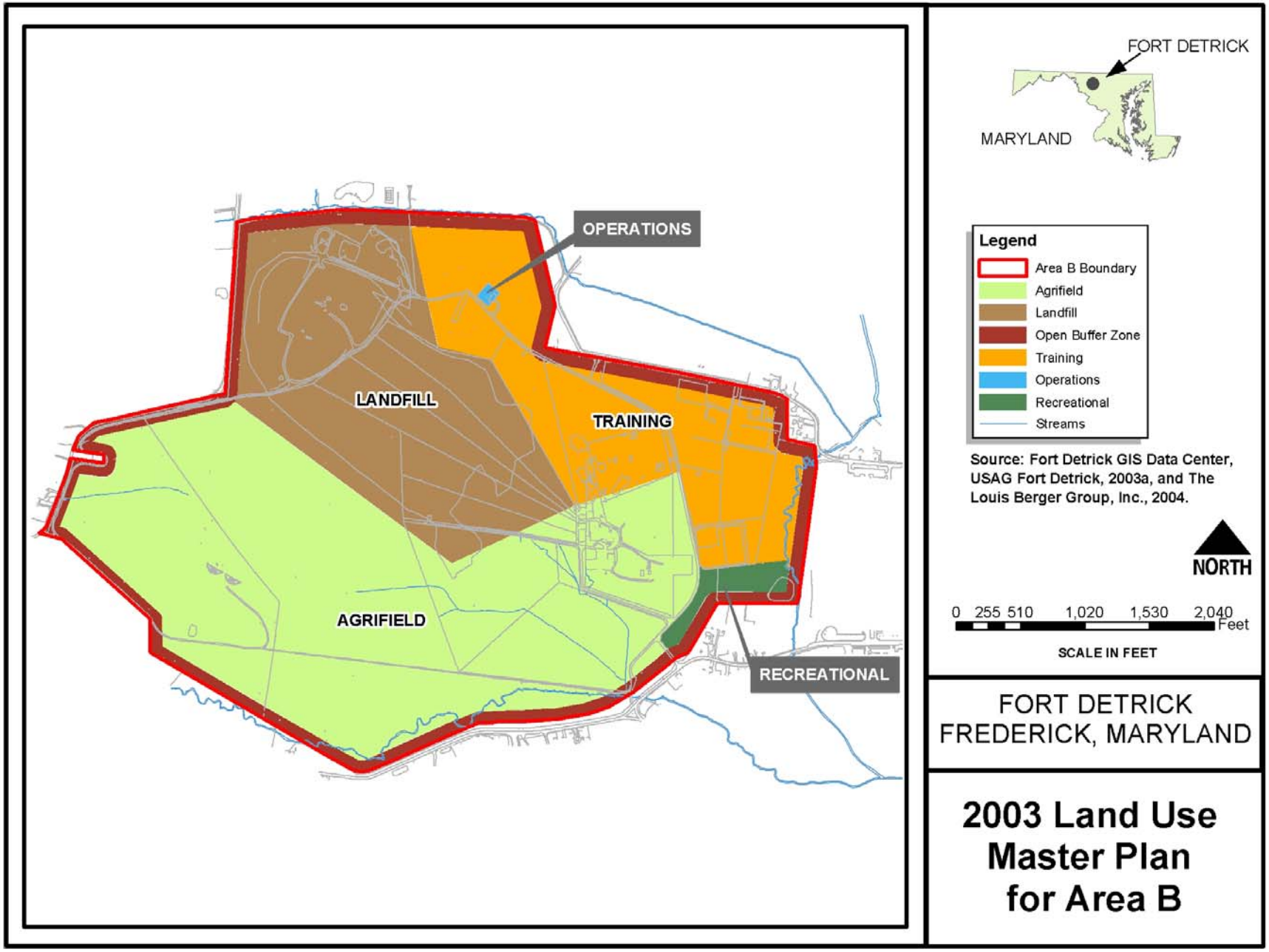


**FIGURE 2-1 – LAND USE PLAN FOR AREA B (INSTALLATION MASTER PLAN EA, 2003)**

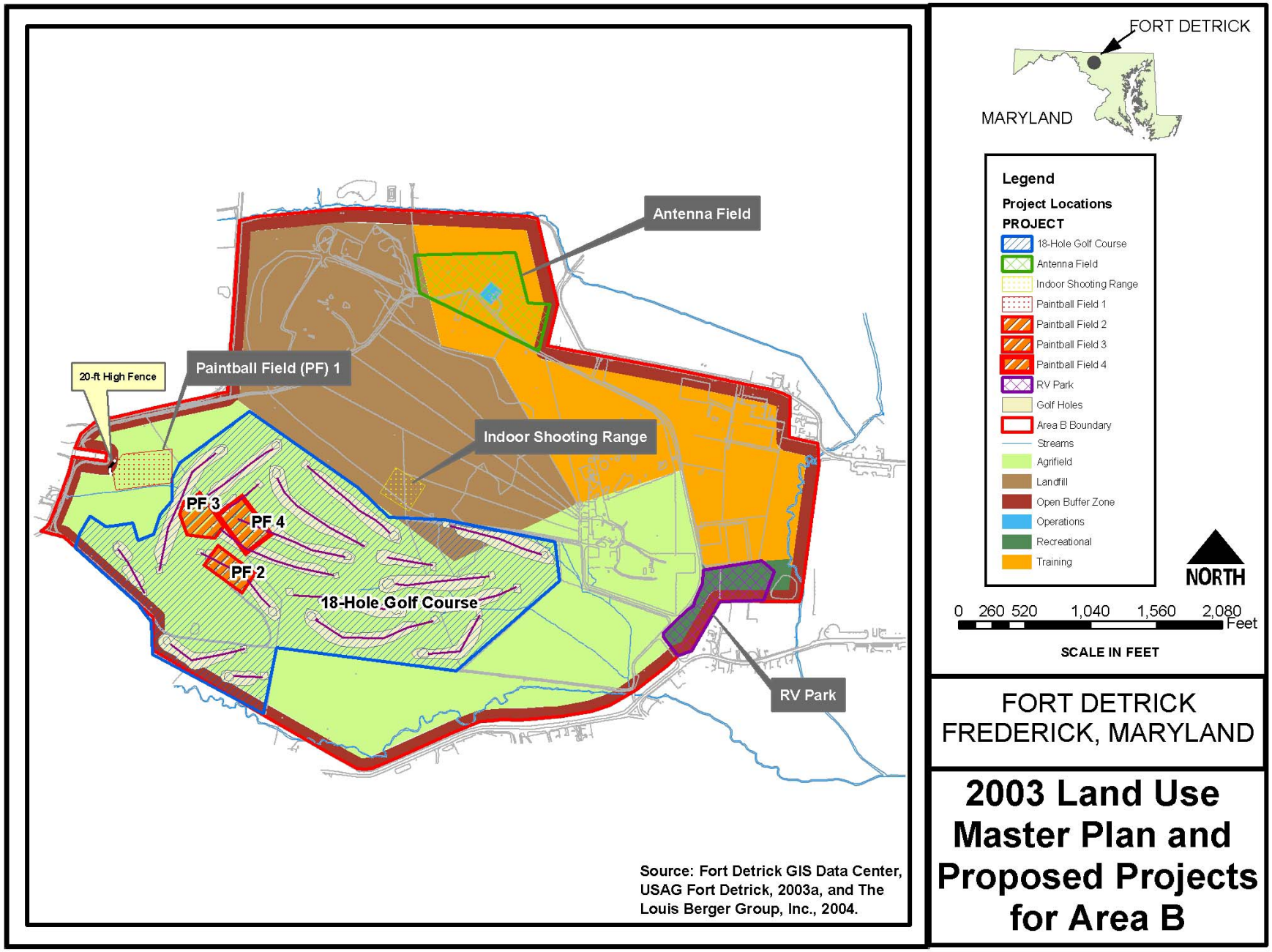


**FIGURE 2-2 – 2003 LAND USE MASTER PLAN AND PROPOSED PROJECTS FOR AREA B**

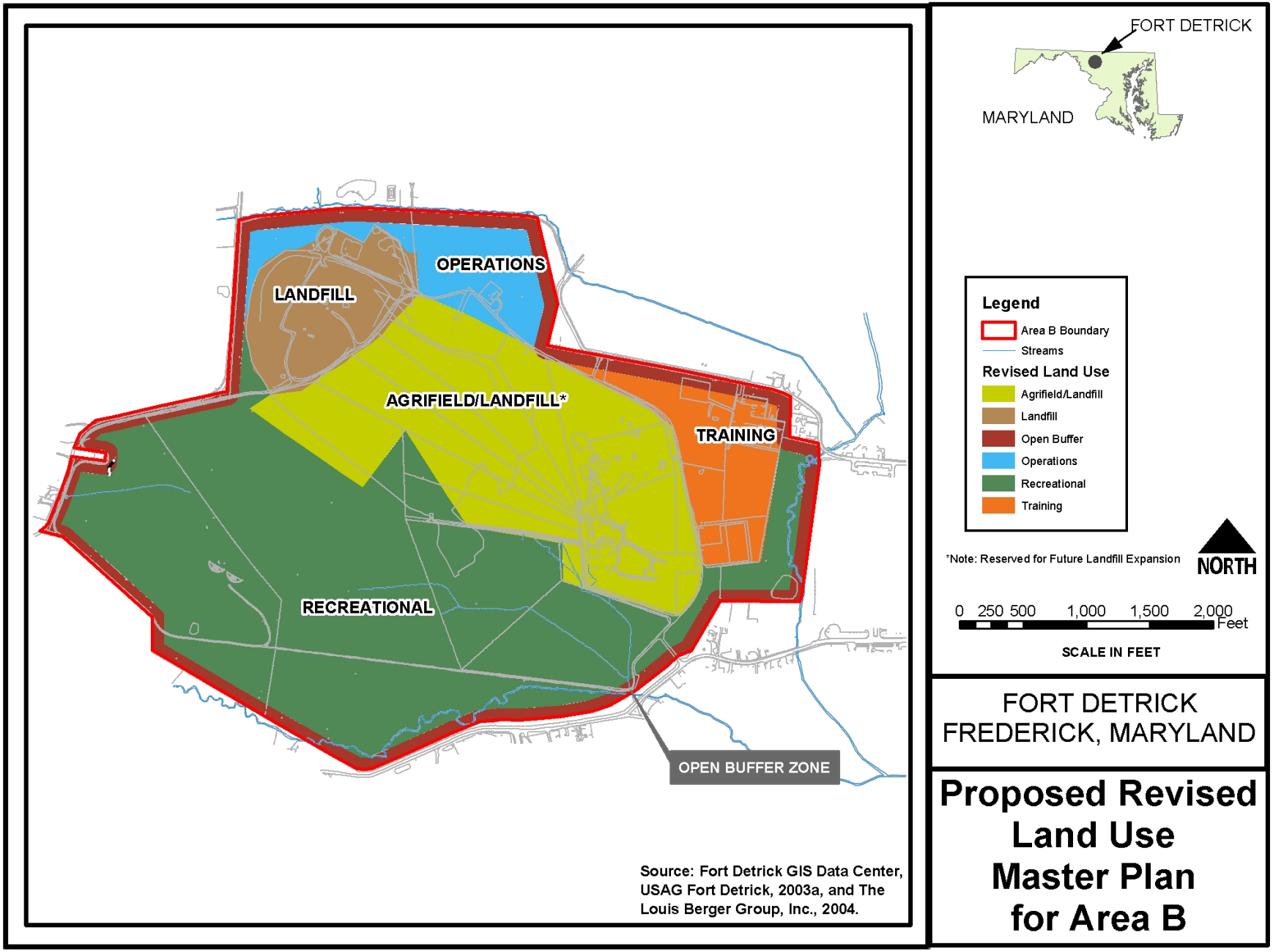


**FIGURE 2-3 – PROPOSED REVISED LAND USE MASTER PLAN FOR AREA B**

potentially be operated 365 days of the year from 0800 hours (8:00am) to dusk. The customer base would include MWR-eligible personnel (i.e., Fort Detrick civilians and military, contract employees, military retirees, civilian retirees) and their guests. The golf course and its support facilities would be designed for the use of up to 300 golfers per day.

The proposed location for the golf course is currently designated as agrifield (STV, Inc., 2003). This area was previously used for cattle grazing, which was terminated in 2003. To oversee operations and services, a Proshop of approximately 5,000 square feet (SF) would be constructed for the golf course. The Proshop would include a resale area, restrooms, general storage, pesticide storage, maintenance area, and a room for the storage of electric golf carts. This facility would be provided with potable water, sewer, electric, and telecommunications. It is assumed that electricity would be used for facility heating. The Fort Detrick potable water and wastewater collection systems may be used to provide potable water and to collect wastewater; however, an onsite sewage system (i.e., State-permitted holding tank and septic system) could serve as an alternative for the disposal and treatment of wastewater for the Proshop. Electric service would also be provided for exterior and parking lights required for safety and security. No underground storage tanks (USTs) or aboveground storage tanks (ASTs) are needed for the operation of the golf course or the Proshop.

An irrigation pond and system would be installed to provide irrigation or sprinklers for the golf course. Surface water ponds would be developed for stormwater management and for golf course irrigation purposes. Additional feasibility studies and NEPA analysis would be required for the golf course if it is later determined that more water (i.e., groundwater) is necessary for irrigation. In addition to the irrigation system, pesticides and fertilizers will be used for golf course maintenance and care.

Impervious surfaces being proposed for the golf course include an asphalt or gravel parking lot for approximately 50 vehicles, asphalt or gravel golf cart paths, sidewalks, the Proshop, and new asphalt or gravel roads (gravel may be used in lieu of asphalt depending on recommended design) providing access to the golf course. The total amount of estimated impervious and/or semi-impervious surfaces created by these five sources would be approximately five acres.

## 2.2 PAINTBALL FIELDS

Four Paintball Fields would be created on Area B for recreation. The locations of the four proposed Paintball Fields are delineated in Figure 2-2. The four Paintball Fields include:

- Paintball Field 1 would be situated on approximately two acres of forested land located on the western section of Area B near the cemetery adjacent to Kemp Lane.

- Paintball Field 2 would use open land and structures associated with the abandoned outdoor skeet shooting range.

- Paintball Field 3 would be on roughly 2 acres of land surrounding a U-shape earth mound previously used as an explosive disposal area. This mound was used as a control burn area for the destruction of small amounts of explosives during operation of the Outdoor

Simulant Testing grid; refer to Section 4.6 *Hazardous Material and Waste* for a description of the Outdoor Simulant Testing grid.

- Paintball Field 4 would be located in an open area within the fan of the abandon skeet shooting range.

Paintball Fields 2, 3 and 4 would cease operations upon the start of construction for the golf course. These areas would be transformed into golf holes. The Paintball Fields would potentially operate during the summer on Fridays from 1400 hours (2:00 pm) to 2000 hours (8:00 pm) and Saturdays and Sundays from 0900 hours (9:00 am) to 2000 hours (8:00 pm). In the winter the Paintball Fields would only operate on Saturday and Sunday from 0900 hours (9:00 am) to 1600 hours (4:00 pm). The customer base would include MWR-eligible personnel (i.e., Fort Detrick civilians and military, contract employees, military retirees, civilian retirees) and their guests. Additionally, the local and regional Boy Scouts of America troops would be eligible to use the Paintball Fields. The Paintball Fields would also be utilized for military training. Estimated usage of the Paintball Fields has not been determined

The proposed locations for the Paintball Fields are currently designated as agrifield. An estimated 1,000 SF storage shed would be constructed in the vicinity of the Paintball Fields and would be used for general storage and the processing of participants. Additionally, the storage shed would be equipped with restrooms for participants and staff. Utility services provided to the storage shed would include potable water, sewer, electric, telecommunications, and natural gas or propane services. The Fort Detrick potable water systems would be used to provide potable water to the paintball facility. Connection to the installation's wastewater treatment system is not available to the western section of Area B; therefore, an onsite sewage system (i.e., State-permitted holding tank and septic system) or the use of portable bathroom stalls (e.g., Port-a-Pots) could serve as an alternative for the disposal and treatment of wastewater. No USTs or aboveground ASTs would be needed for the operation of the storage shed.

No hazardous waste would be generated and no pesticides would be used for the maintenance of the Paintball Fields. The paintball capsule used in the game of paintball is a gelatin capsule filled with water-soluble dye that is a non-hazardous substance. Paintball operation procedures would be developed to minimize, if not eliminate, the potential risk associated with paintballs leaving the playing field, as well as Fort Detrick property. A 20-foot high nylon fencing material supported by telephone poles would be constructed in the northeast corner of Paintball Field 1 to prevent paintballs from entering the cemetery adjacent to Kemp Road.

Impervious surfaces being proposed for the Paintball Fields include an asphalt or gravel parking lot for approximately 25 vehicles, sidewalks, a storage shed, and a new asphalt or gravel road (gravel may be used in lieu of asphalt depending on recommended design) extending from the proposed Indoor Shooting Range. A second option to access the Paintball Fields is to extend the roadway from the existing road at the abandoned skeet range. The total amount of estimated impervious and/or semi-impervious surfaces created by these four sources would be approximately three acres.

## 2.3 INDOOR SHOOTING RANGE

The Indoor Shooting Range would be situated on approximately two acres of land located in the center of Area B. The Indoor Shooting Range would be a dome tent structure of approximately 30,000 SF (100 feet by 300 feet), constructed with an aluminum frame with a nylon-reinforced Polyvinyl Chloride (PVC) covering. Flooring for the Indoor Shooting Range would be entirely constructed of asphalt or concrete. This facility would provide archery and skeet, 9-millimeter (mm) pistol, and M16 rifle shooting.

For the purposes of this EA, it is assumed that the tent will include an area designated for skeet shooting and a separate fully enclosed facility for rifle and pistol shooting. The area utilized for indoor skeet shooting could be designated by a canvas enclosed area supported by multiple telephone poles and cables. This enclosed area within the tent, surrounded by canvas walls on three sides and a canvas top, would prevent shotgun shot from leaving the designated skeet shooting areas and from damaging or puncturing the tent's PVC covering, and could potentially reduce noise. However, the final design for the indoor skeet shooting area may consist of another building material for its protective shell (i.e., concrete blocks, wood, etc.) that would further minimize the possibility of shotgun shot leaving the designated skeet shooting area and noise escaping the tent.

Rifle and pistol shooting will be located in a separate fully enclosed facility situated inside the tent. A separate facility for rifle and pistol shooting within the confines of the tent that has been designed and operated using current Indoor Shooting Range standards (Navy Environmental Health Center, Technical Manual NEHC-TM6290.99 Rev.1, *Indoor Firing Ranges Industrial Hygiene Technical Guide*), would eliminate the possibility of rifle or pistol rounds exiting the enclosed facility and the tent structure. Additionally, a fully enclosed structure will further reduce the exterior noise generation resulting from rifle and pistol shooting. The indoor small arms firing range will include 12 to 15 firing stalls approximately 300 feet long (Stotelmeyer, pers. comm., 3/30/04).

The exterior base of the dome tent would be completely surrounded by a 4- to 6-foot high earth berm that would be planted with at least three rows of 6- to 7-foot evergreens. Shotgun shells would be limited to 1-1/8 ounces of shot and a 3-dram equivalent weight powder load.

Operation of the indoor shooting was assumed for the purpose of the EA to operate from 0900 hours (9:00 am) to 2100 hours (9:00 pm) seven days of the week. It is assumed for the analysis of this EA that indoor skeet shooting operations would occur Wednesday through Friday from 1100 hours (11:00 am) to 1300 hours (1:00 pm) and from 1700 hours (5:00 pm) to 2100 hours (9:00 pm); Saturday from 1200 hours (12:00 pm, noon) until 2000 hours (8:00 pm); and on Sunday from 1300pm (1:00 pm) to 1900 hours (7:00 pm). The indoor skeet shooting range would be closed on Mondays and Tuesdays. The customer base would include MWR-eligible personnel (i.e., Fort Detrick civilians and military, contract employees, military retirees, civilian retirees) and their guests. The fully enclosed small arms shooting range located inside the tent would also be utilized for military training and small arms annual recertification for military and required civilian personnel as required by AR-190-14.

The proposed location for the Indoor Shooting Range is situated between two land use designations: Agrifield and Landfill (i.e., area reserved for future landfill). This area was

previously used for cattle grazing, which was terminated in 2003. To oversee operations and service, a clubhouse of approximately 4,000 SF would be constructed adjacent to the Indoor Shooting Range. The clubhouse would include personnel offices, a resale area, restrooms, and an area for general storage. This facility would be provided with potable water, sewer, electric, telecommunications, and natural gas or propane services. The Fort Detrick potable water and wastewater collection systems may be used to provide potable water and to collect wastewater; however, an onsite sewage system (i.e., State permitted holding tank and septic system) could serve as an alternative for the disposal and treatment of wastewater. Propane or natural gas would be used for heating the clubhouse only. The dome tent would not be heated or cooled. Electric service would also be provided for exterior and parking lights required for safety and security. No USTs or ASTs would be needed for the operation of the clubhouse or the Indoor Shooting Range.

Operation of the Indoor Shooting Range would require the collection of lead shot/particulates and clay pigeons from the asphalt or concrete floor by using a High Efficiency Particulate Air (HEPA) filtered vacuum device. Lead shot/particulates would be collected and recycled as necessary according to the Navy Environmental Health Center, Technical Manual NEHC-TM6290.99 Rev.1, *Indoor Firing Ranges Industrial Hygiene Technical Guide*. Furthermore, the dome tent would be provided with an indoor air treatment system, consisting of four (4) exhaust blowers. Air discharged from the Indoor Shooting Range would pass through a HEPA filtration system to the remove lead air particles produced by gun fire. This equipment would be staged outside the tent structure.

Impervious surfaces being proposed for the operation of the Indoor Shooting Range include an asphalt or gravel parking lot for approximately 25 vehicles, sidewalks, a clubhouse, a dome tent, and new asphalt or gravel roads (gravel may be used in lieu of asphalt depending on recommended design) providing access to the clubhouse. The total amount of estimated impervious and/or semi-impervious surfaces created by these five sources would be approximately two acres.

## 2.4 RECREATIONAL VEHICLE (RV) PARK

The RV Park would be located on the southeast section of Area B and would be situated on approximately 22 acres of land. This campground would consist of 40 to 50 sites, a storage facility, three 1,000 SF support buildings, and two 500 SF pavilions. Each RV site would be provided with a 400 SF concrete pad, a fire ring barbecue pit, and a picnic table. Services provided to each site would include water, electric, telephone, and cable television service. The first 1,000 SF support building would be used for operations offices, a recreation room, and restrooms. The second 1,000 SF support building would provide showers, restrooms, and an area for clothes washers and dryers. The third 1,000 SF support building would include a pump and a sewage dump station (wastewater). The 500 SF open pavilions would be used for picnics and protected gatherings. The customer base would include MWR-eligible personnel (i.e., Fort Detrick and other military installation civilians and military, contract employees, military retirees, civilian retirees) and their guests. Estimated occupancy is 50 percent year round; however, for the purpose of this EA it is assumed that peak occupancy, 90 percent, would occur between the months of May and August.

The proposed location for the RV Park is currently designated as recreation (STV, Inc., 2003). This area is currently open space and is adjacent to the AFMESA facilities, an intermittent stream, and Post Pond (a small pond located in the eastern section of Area B). The RV Park would be provided with potable water, sewer, electric, telecommunications, and natural gas or propane services. The Fort Detrick potable water and wastewater collection systems may be used to provide potable water and to collect wastewater; however, an onsite sewage system (i.e., State-permitted holding tank and septic system) could serve as an alternative for the disposal and treatment of wastewater. Electric service would also be provided for exterior campground lights, to each RV site (one pole light for each site), the three supporting buildings, and the pavilions. A propane storage tank and a dump station storage tank would be installed to support operations. Dumpsters for the collection of solid waste and recyclable material would be provided throughout the campground for disposing of and recycling solid waste.

Impervious and semi-impervious surfaces being proposed for the RV Park include 40 to 50 concrete site pads, the three support buildings, the two pavilions, and new asphalt or gravel roads (gravel may be used in lieu of asphalt depending on recommended design) to provide access to the campground. The total amount of estimated impervious and/or semi-impervious surfaces created by these four sources would be approximately two acres.

## 2.5 RELOCATION OF SEVEN HIGH FREQUENCY ANTENNAS FROM AREA A TO AREA B

This proposed project would relocate seven high-frequency antennas from Area A to Area B. The seven antennas would be placed adjacent to the two existing antennas located in the northern section of Area B on the north side of the landfill road. Depending on the height of the antennas, the land space required will range from roughly 0.2 acres to 0.3 acres per tower. Of the seven antennas proposed for relocation, five are 60 feet tall and the remaining two are 90 feet tall. A concrete foundation of roughly 16 SF and six guy wires would be required to support each antenna. Figure 2-3 is a photograph of one of the two existing antennas located in Area B. The seven antennas that would be relocated to Area B are very similar to the antenna tower displayed in Figure 2-3.

Building 1224, the Communication Building, is located in the northern section of Area B and supports the operation of the two antennas on Area B (Figure 2-4).

**FIGURE 2-4 – ONE OF THE TWO ANTENNAS CURRENTLY LOCATED IN AREA B**

Under this proposed project, Building 1224 would be renovated and used to support the operation of all nine antennas. The footprint of Building 1224 would not be altered under this renovation. This facility is provided with electric and telecommunications service. A bathroom would be installed in Building 1224. The Fort Detrick potable water and wastewater collection systems may be used to provide potable water and to collect wastewater; however, an onsite sewage system (i.e., State-permitted holding tank and septic system) could serve as an alternative for the disposal and treatment of wastewater. Underground transmission lines from the antennas to the Communication Building would need to be installed. An AST would be included for an estimated 20 kilowatt (kW) emergency generator required to operate the antennas during power failure. The AST would be part of and packaged with the proposed generator. Also, the perimeter of the antennas would be protected with a six to eight-foot high chain link fence. The antennas would be continually operated around the clock, seven days a week.

## 2.6 AREA B PERIMETER FENCE

Area B is currently surrounded by a perimeter fence that is approximately 17,500 linear feet or 3.3 miles. The existing fence is roughly four feet high and is constructed of recycled plastic fence posts (spaced approximately 8 to 10 feet apart) and wire fencing. Two scenarios could occur under this proposed project to enhance the existing perimeter fence. Both scenarios include installation of an eight foot high chain-link fence topped with barbed wire. Under the first scenario the proposed fence would replace the existing perimeter fence at its current location. The second scenario would install the proposed fencing at 20 to 30 feet inside the existing four-foot high fence. The new fence would be installed either per scenario one or scenario two depending on field conditions and security requirements. Installing proposed fencing from 20 to 30 feet inside the existing fence line would only occur in areas not constrained by existing construction and environmental and cultural resources (e.g., the lime kiln, wetlands, and streams).